40 CFR Part 63 Subpart EEE is a NESHAP regulation applicable to hazardous waste combustor units that are regulated under 40 CFR parts 260 through 270 as RCRA Hazardous Waste Unit. The ORU-2 Unit is a recycling and recovery unit that is exempt from the federal permitting requirements of 40 CFR Parts 260 through 270, including Subpart EEE. Therefore, the ORU-2 unit while operating in compliance with 40 CFR § 261.6(a)(iv)(C) is not subject to Subpart EEE nor is it appropriate to apply Subpart EEE's standards to the ORU-2 Emissions.

Due to recent events in Oregon surrounding air toxics, Oregonians are most concerned about air toxics in relation to how their health is being affected by industrial emissions sources. While Oregon is currently undergoing rulemaking on air toxics, Oregon has already established benchmarks for 52 of these toxic air pollutants. CWMNW believes the appropriate measure by which the ORU-2 should be evaluated is the Oregon Toxics air toxic benchmarks codified in the Oregon rules at OAR 340-246-0090. These air toxic benchmarks are intended to be protective of human health and the environment. Oregon air toxics benchmarks are based on concentration levels that would result in a cancer risk of no more than one-in-one-million additional cancers based on a lifetime of exposure. For non-carcinogens, the benchmarks are levels you could breathe for a lifetime without any non-cancer health effects. The benchmarks are based on concentration levels that protect the health of Oregon's most sensitive individuals. These benchmarks provide consistent health-based goals, as DEQ develops strategies to reduce air toxics

Oregon's air toxics benchmark for mercury is $0.30\mu g/m^3$ (micro-grams per cubic meter). Wastes treated by the ORU-2 unit do not have a RCRA limit for mercury, thus mercury was not considered by the EPA as a contaminant of concern for these wastes. After a review of the available data, dispersion modeling based on very conservative assumptions for the mercury concentrations, process throughput, and ORU-2 mercury removal efficiency; there is no evidence that mercury emissions from the ORU-2 exceed the Oregon air toxics benchmark threshold at the point of highest concentration.

CWMNW modelled the ORU-2 mercury emissions by using a 150ppmw as the mercury concentration input for the recycled material, a system throughput of 7 tons per hour, and a system mercury removal efficiency of 98%. From this modelling, the mercury emissions from the ORU-2 system at the highest point of concentration equate to 17% of the air toxics benchmark concentration or $0.05\mu g/m^3$ versus the $0.30\mu g/m^3$ benchmark. To reach the mercury benchmark at the highest point of exposure determined by the dispersion modeling, the system removal efficiency would need to be less than 89.3% versus the estimated efficiency of 98% used by TD*X. The analysis was conducted using a conservative annual average concentration of 150ppmw mercury in the input material, with exposures over a person's lifetime, to calculate emissions and project concentrations at the onsite receptor point against the mercury air toxics benchmark. Current average mercury concentration of materials in storage at CWM is 12.6ppm.

CWMNW used the industry standard AERMOD dispersion model with site specific weather and building downwash data. Using the site-specific data in the model, the area with the highest modelled concentration is approximately 850 feet NE of the TOU stack. The results from the dispersion modeling are conservative in that the onsite locations with highest concentration was used in the analysis. Concentrations and percent of the mercury toxics benchmark would be significantly lower at offsite receptors. The AERMOD isopleth depicting the mercury plume is shown in the picture below.

The area of highest concentration is well within the CWM property boundary and is not occupied. The nearest continuously occupied residence (receptor) in the prevailing wind direction is 22,000 feet to the NW.

As a result of the assertions by TD*X and in agreement with Oregon DEQ, CWMNW has agreed in concept to the following requirements from Oregon DEQ.

1. Completion of the toxics review and modeling for the remaining 51 toxics with benchmarks in Oregon.
2. Completion of a mass balance analysis for mercury on a known concentration of exempt waste to identify the mercury distribution by the system into the output streams.
3. Sampling and analysis of the non-condensable gas sent to the Thermal Oxidizer during the mass balance analysis run.
4. Convert the sites current Simple ACDP permit to a higher level Standard Permit during the facility's current permit renewal process.
5. Complete a source test on the thermal oxidizer to demonstrate actual emissions of the unit upon finalization of the Standard air permit process.
6. During the facility's Subpart B TSDF Permit renewal process, Oregon DEQ will add subpart X requirements to the thermal desorber system to establish operational requirements and emission standards for the unit while treating hazardous waste.